CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM

maintained by the

CALIFORNIA DEPARTMENT OF FISH AND GAME

and supported by the

CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP

Database Version 8.1 (2005)

B052 Great Egret Ardea alba

Family: Ardeidae Order: Ciconiiformes Class: Aves

Written by: S. Granholm

Reviewed by: D. Raveling, D. Airola

Edited by: R. Duke

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The great egret is a common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests in large trees, and roosts in trees (Grinnell and Miller 1944, Cogswell 1977). In southern California, common all year, and breeds at Salton Sea and Colorado River. Fairly common in coastal lowlands September to April, rare in summer, and breeds in Riverside Co. (one small colony). Rare to uncommon in deserts, occurring mainly as a spring migrant (Garrett and Dunn 1981). In northern California, fairly common to common yearlong in coastal lowlands, inland valleys, and the Central Valley. Locally abundant March to July near the larger nesting colonies. Uncommon to fairly common March to August on the northeastern plateau, and nests locally (Cogswell 1977, McCaskie et al. 1979).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feeds in shallow water and along shores of estuaries, lakes, ditches, and slow-moving streams, in salt ponds and mudflats, and in irrigated croplands and pastures. Eats mainly fishes, amphibians, snakes, snails, crustaceans, insects, and small mammals (Palmer 1962). Stands motionless or stalks slowly, then rapidly strikes prey with bill (Kushlan 1976a).

Cover: Roosts communally in trees. Rests in day in same habitats as it feeds.

Reproduction: In California, nests in large trees (Grinnell and Miller 1944), usually near water, at a height of 6-12 m (20-40 ft), but ranging from 3-24 m (10-80 ft). Nests often are sheltered from prevailing winds (Yull 1972, Ives 1973), and may be as high as 30 m (100 ft) (Pratt 1972). Nest is built of sticks and stems of marsh plants. Nesting colony must be isolated from human activities, or parents may abandon nests (Ives 1972, 1973, Cogswell 1977).

Water: No additional data found.

Pattern: Requires groves of trees suitable for nesting and roosting, relatively isolated from human activities, near aquatic foraging areas. May forage up to 32 km (20 mi) from nest, but usually much closer (Custer and Osborn 1978).

SPECIES LIFE HISTORY

Activity Patterns: Yearlong, diurnal activity.

Seasonal Movements/Migration: Resident yearlong throughout most of its California range, but leaves the northeastern plateau September to February. From March to July, populations are concentrated near nesting colonies; after nesting, individuals disperse and wander widely.

Home Range: Breeding home range was 8-16 km (5-10 mi) radius around nest (Ives 1973, Yull 1972). Winter home range was the same, centered around roost (Yull 1972). In North Carolina, foraged up to 32 km (20 mi) from nest (Custer and Osborn 1978).

Territory: Breeding territory is limited to the immediate vicinity of nest, and is used for courtship and copulation as well as nesting. Separate feeding territory is defended against all smaller species of herons (Palmer 1962). Nests in Marin Co. were spaced just beyond reaching distance of sitting individuals (Pratt 1970). In Louisiana, unpaired individuals defended "large" territories, which gradually shrank to a mean of 4 m2 (43 ft2) after pairing (Wiese 1976). In California, defended 100-200 m (328-656 ft) of ditch as feeding territories (Schlorff 1978).

Reproduction: Nests mainly March to July; May to July on northeastern plateau (Cogswell 1977). A monogamous, colonial nester. Clutch size usually 3-5, range 2-6. Probably single-brooded, with incubation lasting 26 days (Maxwell and Kale 1977). Semi-altricial, downy young fed by both parents. Age at first flight probably 5-6 wk, but there is no information on ages at independence or first breeding (Palmer 1962).

Niche: Defends feeding territory against smaller herons, but may be driven away by great blue heron (Palmer 1962). In California, often nests in mixed colonies with great blue herons. Intrusions of humans into nesting colonies often cause parents to desert nests; many former nesting colonies have been abandoned (Cogswell 1977). High winds often destroy eggs, nests, and nestlings (Page 1971, Ives 1972). Eggshell thinning from pesticides may reduce breeding success (Ives 1972). Wetland drainage has markedly reduced available habitat.

REFERENCES

- Cogswell, H. L. 1977. Water birds of California. Univ. California Press, Berkeley. 399pp. Custer, T. W., and R. G. Osborn. 1978. Feeding habitat use by colonially-breeding herons, egrets, and ibises in North Carolina. Auk 95:733-743.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Grinnell, J., and A. H. Miller. 1944. The distribution of the birds of California. Pac. Coast Avifauna No. 27. 608pp.
- Ives, J. H. 1972. Common egret and great blue heron nest study, Indian Island, Humboldt County, California. Calif. Dep. Fish and Game, Sacramento. Wildl. Manage. Branch adm. Rep. No. 72-9. 41pp.
- Ives, J. H. 1973. The breeding biology of the common egret on Humboldt Bay, California. M.S. Thesis, Humboldt State Univ., Arcata. 74pp.
- Kushlan, J. A. 1976a. Feeding behavior of North American herons. Auk 93:86-94.
- Maxwell, G. R., II, and H. W. Kale II. 1977. Breeding biology of five species of herons in coastal Florida. Auk 94:689-700.
- McCaskie, G., P. De Benedictis, R. Erickson, and J. Morlan. 1979. Birds of northern California, an annotated field list. 2nd ed. Golden Gate Audubon Soc., Berkeley. 84pp.
- Page, P. J. 1971. Second progress report of the San Joaquin River rookery study. Calif.Dep. Fish and Game, Sacramento. Special Wildl. Invest. Rep. 25pp.
- Palmer, R. S., ed. 1962. Handbook of North American birds. Vol. 1. Yale University Press, New Haven, CT. 567pp.
- Pratt, H. M. 1970. Breeding biology of great blue herons and common egrets in central California. Condor 72:407-416.
- Pratt, H. M. 1972. Nesting success of common egrets and great blue herons in the San Francisco Bay region. Condor 74:447-453.

Schlorff, R. W. 1978. Predatory ecology of the great egret at Humboldt Bay, California. M.S. Thesis, Humboldt State Univ., Arcata. 136pp.

Wiese, J. H. 1976. Courtship and pair formation in great egrets. Auk 93:709-724.

Yull, P. F. 1972. Ecology of the common egret (Casmerodius alba) at Humboldt Bay, California. M.S. Thesis, Humboldt State Univ., Arcata. 111pp.

Species notes are designed to support the species-habitat relationships database models in the California Wildlife Habitat Relationships (CWHR) System and are also published within the current version of the CWHR software. Please cite as: California Department of Fish and Game. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships version 8.1 personal computer program. Sacramento, California.